5

10

15

20

ABSTRACT OF THE INVENTION

A technique is disclosed for implementing system modification operations in an information storage and retrieval system. The information storage and retrieval system includes persistent memory configured or designed to store object data. The persistent memory includes at least one data file for storing object data. A first system modification request relating to a first data file is received, the first data file including a first object stored therein. The first system modification request is then implemented. According to a specific embodiment, the implementation of the first system modification request includes suspending write access to the first data file. Concurrently, while the first system modification request is being implemented, updated information relating to the first object may be stored in the persistent memory. According to a specific embodiment, the information storage and retrieval system corresponds to a non-positional, non-log based information storage and retrieval system. According to different embodiments, the information storage and retrieval system of the present invention may be configured to handle a variety of different system modification requests, including, for example, a request to add a mirror data file to be associated with a primary data file, a request to take the primary data file off-line, a request to take the mirror data file off-line. Moreover, according to a specific implementation, the implementing of the first system modification request may performed in real-time, without blocking access to object data stored in the persistent memory.

ATTY DKT: FRSHP006